

Requirement

You must built a Power BI report that meets the following requirements. I will act as the Business Owner and can answer any questions on design, data, other. Ask if unsure.

You have freedom to choose how it will look based on your understanding of the report consumer and business requirement. Your approach, output and technical implementation will be measured.

A customer installs CostBot into their Azure Cloud tenancy. CostBot exports the **daily** costs for all the resources into a table called **Costs**.  
A Resource has Costs, which are further broken down by Meter (e.g. An Azure Virtual Machine might have a Disk which has I/O and Storage and a IP address). All of these records would have the same records in the Costs table for the same day but the Meter IDs would be different. A resource belongs to a single Resource Group and a Resource Group belongs to a single Subscription.

A **CostGroup** is a non-technical grouping of resources. It can be thought of as a "Project" - e.g within a single large enterprise there might be 10 different projects happening and each one is consuming cloud resources. The Project Manager or Program Manager is responsible for these costs, so their view of the dashboard should only show the Resource Groups or Subscriptions related to that CostGroup and the Resources inside of those Subscriptions OR Resource Groups

When we talk about the **Scope** of the report, it is either at the Subscription, Resource Group or CostGroup level. E.g. Show me the costs for the Scope of this CostGroup or these 3 Subscriptions.

**Persona:** This report will be consumed by executives - CIO/CTO, Program Manager, Project Manager (CostGroup Manager)  
**Purpose:** Displays Summary of Costs at a High Level

Report Filters

Must be able to **filter** by the **Scope** and **Date**:

- Scope:**
- All (ie. No filter)
  - Cost Groups
  - Subscriptions
  - Resource Groups
- Date (Period) - Use a Date Table for this.**
- Financial Year
  - Quarter
  - Month
  - Week
  - Day
  - Custom

Report KPIS

- KPIs:**
- **Total Cost KPI for the Scope**
    - Total Cost for Selected Period
    - Total Cost for Previous Period
    - Variance
  - **Current Month Cost for the selected Scope**
    - Previous Month
    - Variance
  - **Total Number of Subscriptions for the Scope**
  - **Total Number of Resource Groups for the Scope**

Report Charts

Page 1 - Overview

- Charts**
1. Top 5 Cost Groups by Cost
  2. Top 5 Subscriptions by Cost
  3. Top 5 Resource Groups by Cost
  4. Line Chart - Last 6 Months including Current

Page 2 - Subscriptions

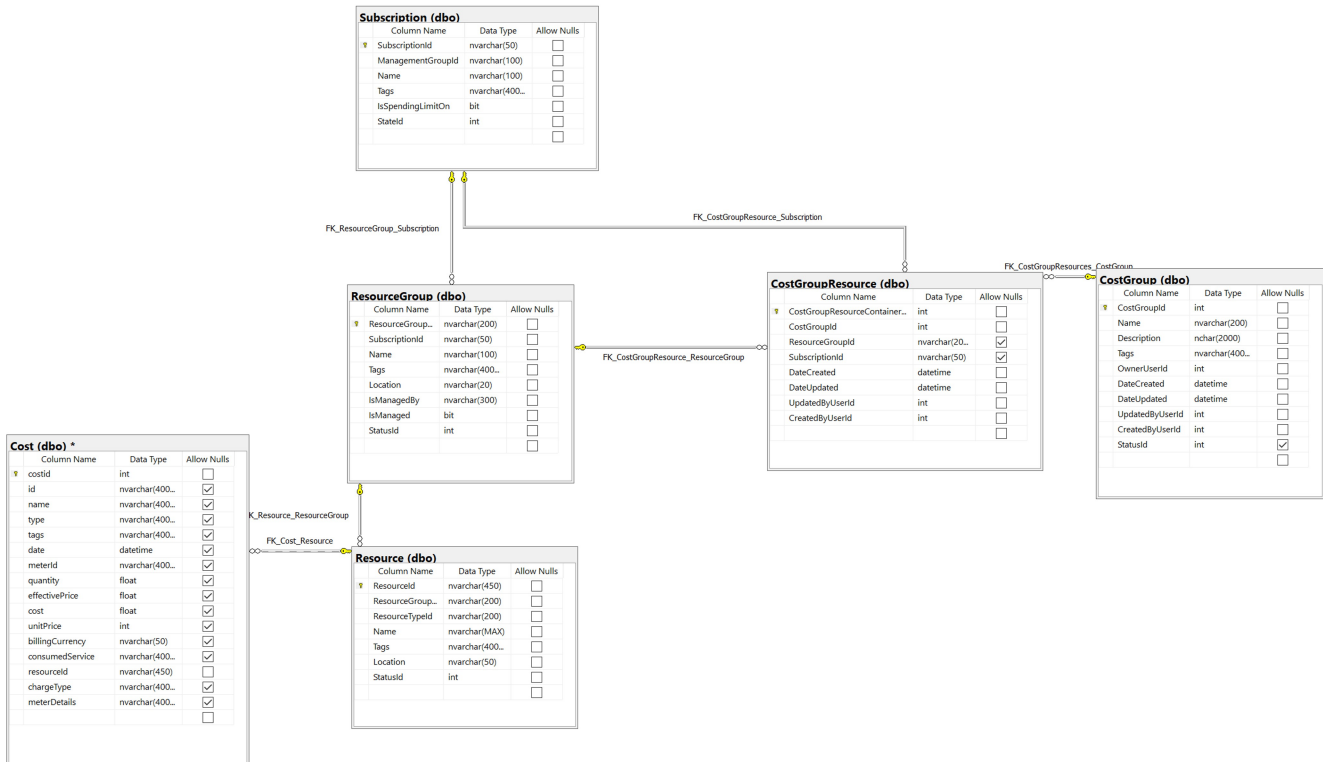
- Charts**
1. Costs By Subscription
  2. Costs by Cost Groups
  3. Costs By Date - Granularity + Drill Down
  4. Total Costs by Location

Non-Functional Requirements

1. It is important that the report looks good. Use this free template here to style it: [Numerro - Free Template \(gumroad.com\)](#)

Azure Resource Hierarchy

A Subscription has 0, 1 or many Resource Groups  
A Resource Group has 0, 1 or many Resources  
A Resource has Costs, which are further broken down by Meter (e.g. An Azure Virtual Machine might have a Disk which has I/O and Storage and a IP address). All of these records would have the same records in the Costs table for the same day but the Meter IDs would be different.



resourceId	nvarchar(450)	<input type="checkbox"/>
chargeType	nvarchar(400...	<input checked="" type="checkbox"/>
meterDetails	nvarchar(400...	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

StatusId	int	<input type="checkbox"/>
		<input type="checkbox"/>

Connection Details for Power BI Desktop

**Server Name:** ddbc-copy.database.windows.net  
**Database:** CostBotTest  
**UserName:** readonlylogin  
**Password:** CostBot123

Note: When you connect to the Server your IP address needs to be added to the Server Firewall - you will need to send your IP to me for me to add it.